Ilp2 User and Developer Guide

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

Chapter 1

One

There's nothing here yet, but the system needs a real section before the appendices start or it breaks!

Appendix A

Database Structure

Ilp2 is built along the principle that the intelligence of a system is best implemented in the application layer and the database layer left for simple persistance of programming objects, and so direct access to the database is discouraged. However it is expected that *read only* access may be required for reporting purposes and the database structure is laid out here to aid in that.

The foreign keys noted in the tables are **not** implemented as database constraints but as relations in the application layer. Note also, that there is no description of the content of the columns here because this is better tackled in the description of the class structure.

! **Warning**
Do not make changes to the data in the database directly unless you are **absolutely sure** that you know what you are doing. Application level triggers will not be fired leading to the possibility of dangling references which could, in turn, cause crashes. You have been warned!

Since Ilp2 is independent of database software, the specific types and sizes cannot be shown for each column. The following table describes the default mapping between the types shown and the actual type used.

Where the defaults are not used, this will be noted in the individual table.

	db2	mysql	openbase	Oracle	postgresql	sqlite	sqlserver
binary	blob(32678)	blob	object	blob	bytea	blob	image
date	date	date	date	date	date	date	datetime
datetime	timestamp	datetime	datetime	date	date	date	datetime
decimal	decimal	decimal	decimal	decimal	decimal	decimal	decimal
float	float	float	float	number	float	float	float(8)
integer	int	int(11)	integer	number(38)	integer	integer	int
string	varchar(255)	varchar(255)	char(4096)	varchar2(255)	*	varchar(255)	varchar(255)
text	clob(32768)	text	text	clob	text	text	text
time	time	time	time	date	time	datetime	datetime
timestamp	timestamp	datetime	timestamp	date	timestamp	datetime	datetime

A.1   Event Tables

Every event in the system has an entry in the *Events* table as well as an entry in its own table. These are linked using a polymorphic relation; the `eventable_type` field contains the name of the class (pluralise to get table name) of the event, and the `eventable_id` field contains the *id* of the event in that table. All events own tables include an integer `person_id` field which identical to the `person_id` field in the related line in the *Events* table.

A.1.1 Events

Field	Type	Index	Null	Notes
id	integer	Primary	No	
person_id	integer	Yes	Yes	Foreign Key to People
eventable_type	string	Yes	No	Part of polymorphic foreign key to eventable interface
eventable_id	string	Yes	No	Part of polymorphic foreign key to eventable interface
event_date	datetime	Yes	No	
parent_id	integer	Yes	Yes	Foreign Key to Events
transition	string	Yes	Yes	
created_at	datetime	No	No	
modified_at	datetime	No	No	

A.1.2 Notes

Field	Type	Index	Null	Notes
id	integer	Primary	No	
person_id	integer	Yes	Yes	Foreign Key to People
body	text	No	Yes	
created_at	datetime	No	No	
modified_at	datetime	No	No	

A.1.3 Targets

Field	Type	Index	Null	Notes
id	integer	Primary	No	
person_id	integer	Yes	Yes	Foreign Key to People
event_id	integer	Yes	Yes	Foreign Key to the Events - the event the target is set against
body	text	No	Yes	
actions	text	No	Yes	
reflection	text	No	Yes	
target_date	datetime	No	Yes	
complete_date	datetime	No	Yes	
set_by_person_id	integer	No	Yes	Foreign Key to People - the person the target was set by
created_at	datetime	No	No	
modified_at	datetime	No	No	

A.1.4 Goals

Field	Type	Index	Null	Notes
id	integer	Primary	No	
person_id	integer	Yes	Yes	Foreign Key to People
body	text	No	Yes	
status	string	No	Yes	
created_at	datetime	No	No	
modified_at	datetime	No	No	

A.1.5 Contact Logs

Field	Type	Index	Null	Notes
id	integer	Primary	No	
person_id	integer	Yes	Yes	Foreign Key to People
body	text	No	Yes	
contact_person_id	string	Yes	Yes	Foreign Key to People - the person contacted
created_at	datetime	No	No	
modified_at	datetime	No	No	

A.2 MIS Shadow Tables

These tables store data imported from MIS system. Much of it is regularly refreshed, so any changes made will usually be undone quite quickly. These tables are used in order to reduce reliance on the MIS system for the running system, to provide a compatability layer for different MIS systems and a structure more suited to the needs of the ilp.

A.2.1 Courses

Field	Type	Index	Null	Notes
id	integer	Primary	No	Auto Increments
title	string	No	No	
code	string	No	No	
year	string	No	No	
mis_id	string	Yes	Yes	Course's id in relevant MIS system
created_at	datetime	No	No	
modified_at	datetime	No	No	

A.2.2 People

Field	Type	Index	Null	Notes
id	integer	Primary	No	Auto Increments
forename	string	Yes	No	
surname	string	Yes	No	
middle_names	string	No	Yes	A serialised ruby array of names
address	string	No	Yes	A serialised ruby array of address lines
town	string	No	Yes	

Field	Type	Index	Null	Notes
postcode	string	No	Yes	
mobile_number	string	No	Yes	
next_of_kin	string	No	Yes	
date_of_birth	datetime	No	No	
uln	integer	Yes	No	Universal Learner Number
mis_id	string	Yes	Yes	Person's id in relevant MIS system
created_at	datetime	No	No	
modified_at	datetime	No	No	

A.2.3 PersonCourse

This table also acts like an event table.

Field	Type	Index	Null	Notes
id	integer	Primary	No	Auto Increments
course_id	integer	Yes	No	Foreign Key to Courses
person_id	integer	Yes	Yes	Foreign Key to People
application_date	datetime	No	Yes	
enrolment_date	datetime	No	Yes	
end_date	datetime	No	Yes	
status	string	No	Yes	